

## REMARKS

In response to the Final Office Action dated January 4, 2011, and in response to the Request for Continued Examination file herewith, claims 22-36 have been canceled and new claims 37-47 have been added. Claims 37-47 are pending in the application.

In paragraph 3 on page 3 of the Office Action, claims 22-27, 33 and 35 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Terreault in view of Smyth and in further view of Jahn.

In paragraph 4 on page 9 of the Office Action, claims 28-32 and 34 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Terreault in view of Smyth and in further view of Jahn, and in further view of Pandya.

Applicant respectfully traverses the rejection, but in the interest of expediting prosecution has canceled claims 22-36 and has added new claims 37-47.

Independent claim 37 sets forth providing a head-end for delivering programming guide and contents to remote set top terminals coupled to display devices for viewing the programming guide and contents, providing a service manager at the head-end for monitoring parameters associated with transport streams for delivering the programming guide and contents to the remote set top terminals, providing a session manager at the head-end for communicating with the set top terminals to control sessions with the set top terminals and manage usage and demands of the set top terminals, providing a monitoring and control device remotely coupled to the head-end for receiving status from the service manager for parameters associated with transport streams for delivering the programming guide and contents to the remote set top terminals and for receiving status from the session manager for usage and demands of the set top terminals demands, storing an identity, a type,

a capability and a reporting level for a plurality of remote devices designated for responding to monitoring and control messages relating to the operation of the head-end from the monitoring and control device, processing, at the monitoring and control device, the status received from the service manager and the status received from the session manager to generate a monitoring and control message relating to the operation of the head-end, analyzing the generated monitoring and control message and the stored identity, type, capability and reporting level for the plurality of remote devices to identify a remote device designated to receive the generated monitoring and control message and to determine a type and format for the generated monitoring and control message to be provided to the identified remote device and providing a communication server for establishing communication between the plurality of remote devices and the monitoring and control device and for providing the generated monitoring and control message to the identified remote device according to the determined type and format.

Jahn only teaches that an alarm report 218 is generated which is then forwarded in real time, if desired, to any number of communication devices 216 based upon, for example, a predetermined distribution list. The distribution list includes only those destination addresses associated with the reportable fault (Abstract). Jahn also states that there can be any number of distribution lists associated with any number of particular reportable faults such that only certain entities are notified for certain of the faults while others are not. (col. 6, lines 60-64). Jahn also states the alarm report is then properly formatted based upon the designated type of communication device for which it is intended to be delivered at 512. In some cases, the alarm report takes the form of an SMTP compliant email, in other cases, it takes the form of a textual page broadcast by any number of conventional paging services,

such as PageNet™. In some cases, a distribution list is used to deliver the alarm report, in other cases, the alarm report can be sent to a single site, such as a command and control console located, in for example, a central office or other such facility. In this way, those entities determined to be most likely to be able to solve a particular problem can be specifically notified of a particular problem. For example, there can be any number of distribution lists associated with any number of particular reportable faults such that only certain entities are notified for certain of the faults while others are not. Of course, according to Jahn, The communication devices 216 can include email, paging systems, control consoles, and the like. In this way, those personnel who can most readily repair the malfunction are immediately notified such that system downtime is minimized.

However, Jahn does not disclose, teach or suggest providing a service manager at the head-end for monitoring parameters associated with transport streams for delivering the programming guide and contents to the remote set top terminals. Jahn also does not disclose, teach or suggest providing a session manager at the head-end for communicating with the set top terminals to control sessions with the set top terminals and manage usage and demands of the set top terminals. Jahn still further fails to disclose, teach or suggest providing a monitoring and control device remotely coupled to the head-end for receiving status from the service manager for parameters associated with transport streams for delivering the programming guide and contents to the remote set top terminals and for receiving status from the session manager for usage and demands of the set top terminals demands.

Jahn only discloses a telephony intranet server (TIS) 210 that monitors the flow between the PBX 208 and the Internet 212, wherein the TIS 210 includes therein a fault detector 310, a fault analyzer 314 and an alarm notifier 316. Thus, the TIS 210, through the

use of the fault analyzer 314 and the alarm notifier 316, generates the fault reports. Jahn does not disclose a head-end that includes a service manager and a session manager. Jahn also fails to even suggest a monitoring and control device remotely coupled to a head-end for receiving status.

Jahn also fails to disclose, teach or suggest storing an identity, a type, a capability and a reporting level for a plurality of remote devices designated for responding to monitoring and control messages relating to the operation of the head-end from the monitoring and control device. Jahn merely discloses that a predetermined distribution list is provided. Jahn discloses that the distribution list includes only those destination addresses associated with the reportable fault (Abstract).

Nevertheless, Jahn does not mention storing a capability and a reporting level for a plurality of remote devices designated for responding to monitoring and control messages. At best, Jahn merely discloses an identity (i.e., an address) and a type (i.e., for determining format of message to send).

Jahn also fails to disclose, teach or suggest processing, at the monitoring and control device, the status received from the service manager and the status received from the session manager to generate a monitoring and control message relating to the operation of the head-end, analyzing the generated monitoring and control message and the stored identity, type, capability and reporting level for the plurality of remote devices to identify a remote device designated to receive the generated monitoring and control message and to determine a type and format for the generated monitoring and control message to be provided to the identified remote device.

Jahn does not mention status received from the service manager and status received from the session manager. Jahn does not mention generating a monitoring and control message relating to the operation of the head-end. A telephony intranet server does not equate to a head-end for delivering programming guide and contents to remote set top terminals coupled to display devices for viewing the programming guide and contents.

Jahn does not mention analyzing the generated monitoring and control message and the stored identity, type, capability and reporting level for the plurality of remote devices to identify a remote device designated to receive the generated monitoring and control message and to determine a type and format for the generated monitoring and control message to be provided to the identified remote device.

Rather, Jahn merely discloses that a report is sent using a predetermined distribution list. Jahn does not base what device receives a message on a correlation of the generated message and the stored identity, type, capability and reporting level.

Thus, Jahn fails to disclose, teach or suggest the invention as defined in independent claim 37.

Terreault fails to overcome the deficiencies of Jahn. Terreault merely describes a system that includes a control computer for monitoring reverse paths to detect and analyze ingress signals. A control computer generates control data indicative of the communication line corresponding to the ingress path to be monitored. The control computer generates diagnostic sequence control data for the monitoring instrumentation also used to determine source characteristics of the ingress signal.

However, Terreault fails to disclose, teach or suggest providing a service manager at the head-end for monitoring parameters associated with transport streams for delivering the

programming guide and contents to the remote set top terminals. Terreault also does not disclose, teach or suggest providing a session manager at the head-end for communicating with the set top terminals to control sessions with the set top terminals and manage usage and demands of the set top terminals. Terreault still further fails to disclose, teach or suggest providing a monitoring and control device remotely coupled to the head-end for receiving status from the service manager for parameters associated with transport streams for delivering the programming guide and contents to the remote set top terminals and for receiving status from the session manager for usage and demands of the set top terminals demands.

Terreault only discloses a control computer for monitoring reverse paths to detect and analyze ingress signals. Terreault does not disclose a head-end that includes a service manager and a session manager. Terreault also fails to even suggest a monitoring and control device remotely coupled to a head-end for receiving status.

Terreault also fails to disclose, teach or suggest storing an identity, a type, a capability and a reporting level for a plurality of remote devices designated for responding to monitoring and control messages relating to the operation of the head-end from the monitoring and control device. Terreault fails to mention the storing of such information.

Terreault also fails to disclose, teach or suggest processing, at the monitoring and control device, the status received from the service manager and the status received from the session manager to generate a monitoring and control message relating to the operation of the head-end, analyzing the generated monitoring and control message and the stored identity, type, capability and reporting level for the plurality of remote devices to identify a remote device designated to receive the generated monitoring and control message and to determine

a type and format for the generated monitoring and control message to be provided to the identified remote device.

Terreault does not mention status received from the service manager and status received from the session manager. Terreault does not mention generating a monitoring and control message relating to the operation of the head-end. Terreault further fails to mention analyzing the generated monitoring and control message and the stored identity, type, capability and reporting level for the plurality of remote devices to identify a remote device designated to receive the generated monitoring and control message and to determine a type and format for the generated monitoring and control message to be provided to the identified remote device.

Thus, Terreault and Jahn, alone or in combination, fail to disclose, teach or suggest the invention as defined in independent claim 37.

Smyth fails to overcome the deficiencies of Terreault and Jahn. Smyth is merely cited as disclosing an interactive television system including modulators and a session control manager that is used to send messages to field service personnel.

However, Smyth fails to disclose, teach or suggest providing a service manager at the head-end for monitoring parameters associated with transport streams for delivering the programming guide and contents to the remote set top terminals. Smyth also does not disclose, teach or suggest providing a session manager at the head-end for communicating with the set top terminals to control sessions with the set top terminals and manage usage and demands of the set top terminals. Smyth still further fails to disclose, teach or suggest providing a monitoring and control device remotely coupled to the head-end for receiving status from the service manager for parameters associated with transport streams for

delivering the programming guide and contents to the remote set top terminals and for receiving status from the session manager for usage and demands of the set top terminals demands.

Smyth only discloses a session control manager having a defective channel detection module, a channel re-allocation module, and a replacement-signaling module. The session control manager is coupled to receive signals from the plurality of set top boxes, and coupled to control the digital video modulators and the assignment of communication channels to nodes. Based on an error rate and other factors the session control manager determines if any of the communication channels used by the digital video modulators are defective.

Smyth does not disclose a service manager at the head-end for monitoring parameters associated with transport streams for delivering the programming guide and contents to the remote set top terminals. Smyth fails to even suggest a monitoring and control device remotely coupled to a head-end for receiving status.

Smyth also fails to disclose, teach or suggest storing an identity, a type, a capability and a reporting level for a plurality of remote devices designated for responding to monitoring and control messages relating to the operation of the head-end from the monitoring and control device. Smyth fails to mention the storing of such information.

Smyth also fails to disclose, teach or suggest processing, at the monitoring and control device, the status received from the service manager and the status received from the session manager to generate a monitoring and control message relating to the operation of the head-end, analyzing the generated monitoring and control message and the stored identity, type, capability and reporting level for the plurality of remote devices to identify a remote

device designated to receive the generated monitoring and control message and to determine a type and format for the generated monitoring and control message to be provided to the identified remote device.

Smyth does not mention status received from the service manager and status received from the session manager. Smyth does not mention generating a monitoring and control message relating to the operation of the head-end. Smyth further fails to mention analyzing the generated monitoring and control message and the stored identity, type, capability and reporting level for the plurality of remote devices to identify a remote device designated to receive the generated monitoring and control message and to determine a type and format for the generated monitoring and control message to be provided to the identified remote device.

Thus, Terreault, Jahn and Smyth, alone or in combination, fail to disclose, teach or suggest the invention as defined in independent claim 37.

Pandya fails to overcome the deficiencies of Terreault, Jahn and Smyth. Pandya is merely cited as monitoring status of buffers for encoding data, multiplexing transport streams and bit rates for a plurality of data being provided at the head-end.

However, Pandya fails to disclose, teach or suggest providing a service manager at the head-end for monitoring parameters associated with transport streams for delivering the programming guide and contents to the remote set top terminals. Pandya also does not disclose, teach or suggest providing a session manager at the head-end for communicating with the set top terminals to control sessions with the set top terminals and manage usage and demands of the set top terminals. Pandya still further fails to disclose, teach or suggest providing a monitoring and control device remotely coupled to the head-end for receiving status from the service manager for parameters associated with transport streams for

delivering the programming guide and contents to the remote set top terminals and for receiving status from the session manager for usage and demands of the set top terminals demands.

Pandya only discloses managing a distributed network environment including a plurality of computers interconnected by a network link. Agents are associated with one of the computers and adapted to dynamically monitor the associated computer at a data transmission point between an application program running on the computer and the transport protocol layer. Accordingly, Pandya does not disclose a head-end that includes a service manager and a session manager. Pandya also fails to even suggest a monitoring and control device remotely coupled to a head-end for receiving status.

Pandya also fails to disclose, teach or suggest storing an identity, a type, a capability and a reporting level for a plurality of remote devices designated for responding to monitoring and control messages relating to the operation of the head-end from the monitoring and control device. Pandya fails to mention the storing of such information.

Pandya also fails to disclose, teach or suggest processing, at the monitoring and control device, the status received from the service manager and the status received from the session manager to generate a monitoring and control message relating to the operation of the head-end, analyzing the generated monitoring and control message and the stored identity, type, capability and reporting level for the plurality of remote devices to identify a remote device designated to receive the generated monitoring and control message and to determine a type and format for the generated monitoring and control message to be provided to the identified remote device.

Pandya does not mention status received from the service manager and status received from the session manager. Pandya does not mention generating a monitoring and control message relating to the operation of the head-end. Pandya further fails to mention analyzing the generated monitoring and control message and the stored identity, type, capability and reporting level for the plurality of remote devices to identify a remote device designated to receive the generated monitoring and control message and to determine a type and format for the generated monitoring and control message to be provided to the identified remote device.

Thus, Terreault, Jahn, Smyth and Pandya, alone or in combination, fail to disclose, teach or suggest the invention as defined in independent claim 37.

Dependent claims 38-47 are also patentable over the references, because they incorporate all of the limitations of the corresponding independent claim 37. Further dependent claims 38-47 recite additional novel elements and limitations. Applicant reserves the right to argue independently the patentability of these additional novel aspects. Therefore, Applicant respectfully submits that dependent claims 38-47 are patentable over the cited references.

On the basis of the above amendments and remarks, it is respectfully submitted that the claims are in immediate condition for allowance. Accordingly, reconsideration of this application and its allowance are requested.

If a telephone conference would be helpful in resolving any issues concerning this communication, please contact Attorney for Applicant, David W. Lynch, at 865-380-5976. If necessary, the Commissioner is hereby authorized in this, concurrent, and future replies, to

charge payment or credit any overpayment to Deposit Account No. 13-2725 for any additional fee required under 37 C.F.R. §§ 1.16 or 1.17; particularly, extension of time fees.

Respectfully submitted,

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